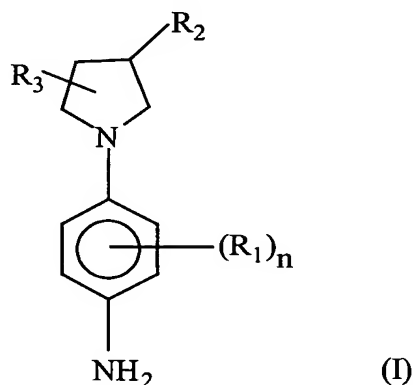


WHAT IS CLAIMED IS :

1. A dyeing composition for dyeing keratinous fibres, in particular human keratinous fibres such as hair, comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, at least one non-cationic tertiary para-phenylenediamine, and at least one benzomorpholine coupler.
2. The composition of claim 1, wherein the cationic tertiary para-phenylenediamine corresponds to formula I:



in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R_1 may be identical or different,

R_1 represents a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C_1 - C_6 hydrocarbon chain, it being possible for the chain to contain one or more oxygen, nitrogen, silicon or sulphur atoms or an SO_2 group, and it being possible for the chain to be substituted with one or more hydroxyl or amino radicals; an onium radical Z, the radical R_1 not containing a peroxide bond, or diazo, nitro or nitroso radicals,

R_2 represents an onium radical Z or a radical $-X-C=NR_8-NR_9R_{10}$ in which X represents an oxygen atom or a radical $-NR_{11}$ and R_8 , R_9 , R_{10} and R_{11} represent a hydrogen atom, a C_1 - C_4 alkyl radical or a C_1 - C_4 hydroxyalkyl radical,

R_3 represents a hydrogen atom or a hydroxyl radical.

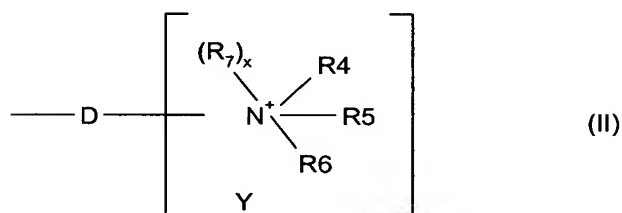
3. The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.

4. The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1 and R₁ is chosen from the group consisting of a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C₁-C₆ hydrocarbon chain; it being possible for one or more carbon atoms to be replaced by an oxygen, nitrogen, silicon or sulphur atom, or by an SO₂ group, the radical R₁ not containing a peroxide bond, or diazo, nitro or nitroso radicals.

5. The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from chlorine, bromine, C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radicals.

6. The composition of claim 5, in which the cationic tertiary para-phenylenediamine is such that R₁ is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

7. The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula (II)



in which

D is a single bond of a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals and which may carry one or more ketone functional groups;

R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl

radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or di-substituted with a C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; or

R₄, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxy-alkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a (C₁-C₆)alkylcarbonyl radical, a thio (-SH) radical, a C₁-C₆ thioalkyl (-R-SH) radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical;

R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphiny(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkyl-carbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkyl-sulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1,

when x = 0, then the linking arm is attached to the nitrogen atom carrying the radicals R₄ to R₆;

when $x = 1$, then two of the radicals R_4 to R_6 form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring;

Y is a counter-ion.

8. The composition of claim 7, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula II in which x is equal to 0 and R_4 , R_5 and R_6 separately are preferably chosen from a C_1 - C_6 alkyl radical, a C_1 - C_4 monohydroxyalkyl radical, a C_2 - C_4 polyhydroxyalkyl radical, a $(C_1$ - $C_6)$ alkoxy(C_1 - C_4)alkyl radical, a C_1 - C_6 amidoalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, or R_4 with R_5 form together an azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl radical, a $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkyl carboxy(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylcarbamyl(C_1 - C_6)alkyl radical.

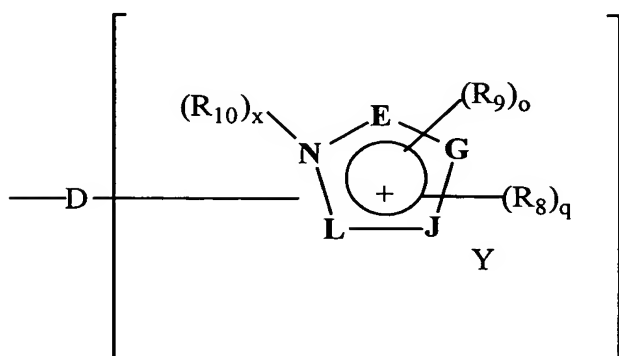
9. The composition of claim 7, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula II in which x is equal to 1 and R_7 is chosen from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxy-alkyl radical; a C_1 - C_6 aminoalkyl radical, a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or a $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarboxy(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylcarbamyl(C_1 - C_6)alkyl radical; R_4 with R_5 together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyl alkyl radical; a C_1 - C_6 aminoalkyl radical; a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl

radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical.

10. The composition of claim 7, wherein the cationic tertiary para-phenylenediamine is such that D is a single bond or an alkylene chain which may be substituted.

11. The composition of claim 7, wherein the cationic tertiary para-phenylenediamine is such that R₂ is a trialkylammonium radical.

12. The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula III



(III)

in which

D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring,

q is an integer between 0 and 4 inclusive;

is an integer between 0 and 3 inclusive;

q+o is an integer between 0 and 4;

the radicals R_8 , which are identical or different, represent a halogen atom, a hydroxyl radical, a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a C_1 - C_6 alkoxy radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, an amido radical, a carboxyl radical, a C_1 - C_6 alkylcarbonyl radical, a thio radical, a C_1 - C_6 thioalkyl radical, a (C_1 - C_6)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 monohydroxyalkyl radical or a C_2 - C_6 polyhydroxyalkyl radical; it being understood that the radicals R_8 are carried by a carbon atom,

the radicals R_9 , which are identical or different, represent a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, a (C_1 - C_6)alkoxy(C_1 - C_6)alkyl radical, a C_1 - C_6 carbamylalkyl radical, a (C_1 - C_6)alkylcarboxy(C_1 - C_6)alkyl radical, a benzyl radical; it being understood that the radicals R_9 are carried by a nitrogen,

R_{10} represents a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C_1 - C_6 aminoalkyl radical, a C_1 - C_6 aminoalkyl radical whose amine is substituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 carboxyalkyl radical; a C_1 - C_6 carbamylalkyl radical; a C_1 - C_6 trifluoroalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a C_1 - C_6 sulphonamidoalkyl radical; a (C_1 - C_6)alkylcarboxy(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylsulphonyl(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylsulphonyl(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylsulphonamido(C_1 - C_6)alkyl radical;

x is 0 or 1

when $x = 0$, the linking arm D is attached to the nitrogen atom,

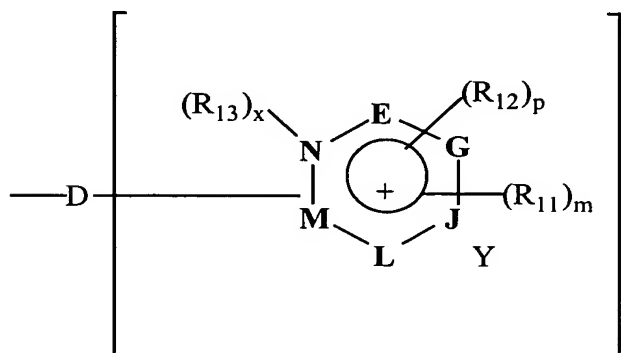
when $x = 1$, the linking arm D is attached to one of the vertices E, G, J or L,

Y is a counter-ion.

13. The composition of claim 12, wherein the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

14. The composition of claim 12, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

15. The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that R_2 represents an onium radical Z corresponding to formula IV



(IV)

in which:

D is a single bond or a linear or branched C_1 - C_{14} alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C_1 - C_6 alkoxy or amino

radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R_{11} , which are identical or different, represent a halogen atom, a hydroxyl radical, a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a C_1 - C_6 alkoxy radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, an amido radical, a carboxyl radical, a C_1 - C_6 alkylcarbonyl radical, a thio radical, a C_1 - C_6 thioalkyl radical, a (C_1 - C_6)alkylthio radical, an amino radical, an amino radical which is substituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 monohydroxyalkyl radical or a C_2 - C_6 polyhydroxyalkyl radical; it being understood that the radicals R_{11} are carried by a carbon atom,

the radicals R_{12} , which are identical or different, represent a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, a (C_1 - C_6)alkoxy(C_1 - C_6)alkyl radical, a C_1 - C_6 carbamylalkyl radical, a (C_1 - C_6)alkylcarboxy(C_1 - C_6)alkyl radical, a benzyl radical; it being understood that the radicals R_{12} are carried by a nitrogen,

R_{13} represents a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C_1 - C_6 aminoalkyl radical, a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 carboxyalkyl radical; a C_1 - C_6 carbamylalkyl radical; a C_1 - C_6 trifluoroalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a C_1 - C_6

sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion.

16. The composition of claim 15, wherein the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

17. The composition of claim 15, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0 and R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

18. The composition of claim 15, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R₁₃ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl radical, an amido radical, a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl

radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

19. The composition of claim 15, wherein the cationic tertiary para-phenylenediamine is such that R₁₁, R₁₂ and R₁₃ are alkyl radicals which may be substituted.

20. The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is the radical of formula -XP(O)(O-)OCH₂CH₂N⁺(CH₃)₃ where X represents an oxygen atom or a radical -NR₁₄, R₁₄ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

21. The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that R₂ is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a C₁-C₄ hydroxyalkyl radical.

22. The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium
bromide,

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl- guanidinium
choride,

N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium choride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine,

{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride,

1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride,

3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride,

1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride,

3-{3-[1-(5-trimethylsilyl-4-amino-3-trimethylsilylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-tetradecylammonium chloride,

N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride,

N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride,

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl-dimethylammonium dichloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine,

{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride,

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride,

3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl}1-methyl-3H-imidazol-1-ium chloride,

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride,

[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,

3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride,

[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,

3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,

3-{{1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl}methyl}-1-methyl-3H-imidazol-1-ium chloride,

3-{{1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl}methyl}-1-methyl-3H-imidazol-1-ium chloride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate,

[1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide,

[1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium iodide.

23. The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide,

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium choride,

N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium choride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride,

N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium choride,

N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium choride,

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropylammonium chloride,
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,
 1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,
 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride,
 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride,
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride,
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanyl-propyl)-3H-imidazol-1-ium chloride,
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride,
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide,
 [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide,
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate,
 [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide,
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide,
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide,
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide,
 [1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide,
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide,
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide,
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride, and

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

24. The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide,

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium choride,

N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium choride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)-dimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride,

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride,

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium
bromide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium
methosulphate,

[1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium
iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium
chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium
iodide.

25. The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium
chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethyl-
ammonium chloride,

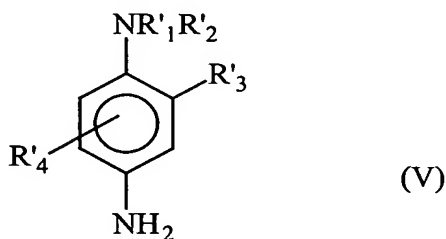
1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride.

26. The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,
and

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxy-ethyl)dimethylammonium chloride.

27. The composition of claim 1, wherein the non-cationic tertiary para-phenylenediamine corresponds to the compounds of general formula (V) and their addition salts with an acid:



in which:

R'₁ is a linear or branched C₁-C₆ alkyl radical or a linear or branched C₂-C₆ hydroxyalkyl radical,

R'₂ is a linear or branched C₂-C₆ hydroxyalkyl radical,

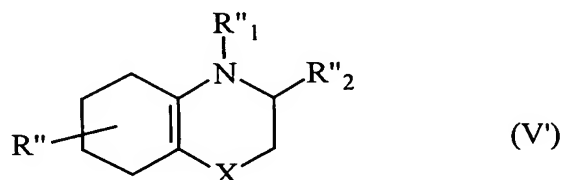
R'₃ denotes a hydrogen atom or a linear or branched C₁-C₆ alkyl radical or a halogen atom, and

R'₄ is a radical situated at any of the free positions of the benzene ring and denotes a hydrogen atom or a linear or branched C₁-C₆ alkyl radical, a linear or branched C₁-C₆ alkoxy radical or a halogen atom.

28. The composition of claim 27, wherein the tertiary para-phenylenediamine not containing a pyrrolidine ring is N,N-bis(β-hydroxyethyl)-p-phenylenediamine.

29. The composition of claim 1, wherein the non-cationic tertiary para-phenylenediamines represent from 0.001 to 15% by weight relative to the total weight of the composition.

30. The composition of claim 1, wherein the benzomorpholine coupler corresponds to the compounds of formula (V') and their addition salts with an acid:



in which:

X represents a sulphur (S) atom or an oxygen (O) atom,

R'' represents a hydroxyl or amino group at the 5, 6 or 7 position,

R''₁ and R''₂ represent a hydrogen atom, a linear or branched C₁-C₆ alkyl radical or a linear or branched C₂-C₆ hydroxyalkyl radical, it being possible for the benzene ring to additionally contain another linear or branched C₁-C₆ alkyl radical.

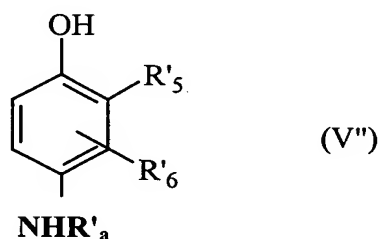
31. The composition of claim 30, wherein the benzomorpholine coupler corresponds to the compounds of formula (V'), and their addition salts with an acid, in which X represents an oxygen atom (O).

32. The composition of claim 30, wherein the coupler is chosen from benzomorpholine, 7-hydroxybenzomorpholine, 7-aminobenzomorpholine, 6-hydroxybenzomorpholine, 6-aminobenzomorpholine, 5-hydroxybenzomorpholine, 5-aminobenzomorpholine, 1-methyl-7-hydroxybenzomorpholine, 2-methyl-7-hydroxybenzomorpholine, 5-hydroxy-7-methylbenzomorpholine.

33. The composition of claim 32, wherein the benzomorpholine coupler is 6-hydroxybenzomorpholine.

34. The composition of claim 1, wherein the benzomorpholine coupler(s) represent from 0.001 to 15%, and preferably from 0.05 to 10% by weight relative to the total weight of the composition.

35. The composition of claim 1, wherein the composition further comprises at least one colorant chosen from the para-aminophenols of formula (V'') and their addition salts



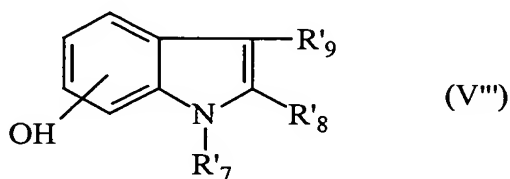
in which:

R'₅ represents a hydrogen or halogen atom, a C₁-C₄ alkyl, C₁-C₄ monohydroxyalkyl, (C₁-C₄)alkoxy(C₁-C₄)alkyl, C₁-C₄ aminoalkyl or hydroxy(C₁-C₄)alkylamino(C₁-C₄)alkyl radical,

R'₆ represents a hydrogen or halogen atom, a C₁-C₄ alkyl, C₁-C₄ monohydroxyalkyl, C₂-C₄ polyhydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ cyanoalkyl or (C₁-C₄)alkoxyl(C₁-C₄)alkyl radical,

R'_a represents a hydrogen atom or a C₁-C₄ alkyl radical, and

the heterocyclic couplers of formula (V''') and their addition salts



in which OH occupies positions 6 or 7 of the aromatic ring and R'₇ denotes a hydrogen atom, a C₁-C₄ alkyl radical; R'₈ and R'₉, which are identical or different, denote a hydrogen atom, a lower C₁-C₄ alkyl radical, a carboxyl radical or a (C₁-C₄)alkoxycarbonyl radical, and their salts.

36. The composition of claim 35, wherein the para-aminophenol of formula (V'') is chosen from para-aminophenol, 4-amino-3-methylphenol, 4-amino-3-fluorophenol, 4-amino-3-hydroxymethylphenol, 4-amino-2-methylphenol, 4-amino-2-hydroxymethylphenol, 4-amino-2-methoxymethylphenol, 4-amino-2-aminomethylphenol, 4-amino-2-(β-hydroxyethylaminomethyl)phenol, 4-amino-2-fluorophenol, N-methyl-para-aminophenol and their addition salts.

37. The composition of claim 35, wherein the heterocyclic coupler of formula (V''') is chosen from 6-hydroxyindole, 6-hydroxy-3-methoxycarbonylindole, 6-hydroxy-1-methyl-3-methoxycarbonylindole, 6-hydroxy-1-methyl-2,3-dimethoxycarbonylindole, 6-hydroxy-1,2-dimethylindole, 6-hydroxy-2-methylindole, 6-hydroxy-2-carboxyindole, 6-hydroxy-2,3-dimethylindole, 6-hydroxy-3-carboxyindole, 6-hydroxy-3-ethoxycarbonylindole, 6-hydroxy-2-ethoxycarbonylindole, 6-hydroxy-3-methylindole, 6-hydroxy-1-methylindole, 7-hydroxyindole, 7-hydroxy-3-methylindole.

38. The composition of claim 37, wherein the heterocyclic coupler of formula (V''') is 6-hydroxyindole.

39. The composition of claim 35, wherein the compounds of formulae (V'') and/or (V''') represent from 0.0001 to 10% by weight relative to the total weight of the composition.

40. The composition of claim 1, wherein the cationic tertiary para-phenylenediamine(s) having a pyrrolidine ring represent from 0.001 to 10% by weight relative to the total weight of the composition.
41. The composition of claim 1, wherein the composition further comprises at least one cationic polymer.
42. The composition of claim 1, wherein the composition further comprises at least one thickening polymer.
43. The composition of claim 1, wherein the composition further comprises at least one surfactant chosen from the group consisting of anionic surfactants, amphoteric or zwitterionic surfactants, nonionic surfactants and cationic surfactants.
44. The composition of claim 1, wherein the composition further comprises at least one additional oxidation base chosen from para-phenylenediamines, bis-phenylalkylenediamines, ortho-aminophenols, heterocyclic bases and their addition salts.
45. The composition of 44, wherein the additional oxidation base(s) are present in a quantity of between 0.001 to 20% by weight relative to the total weight of the composition.
46. The composition of claim 1, wherein the composition further comprises at least one additional coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene couplers, heterocyclic couplers and their addition salts.
47. The composition of claim 46, wherein the coupler is chosen from 1,3-dihydroxybenzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxybenzene, 2,4-diamino-1-(β -hydroxyethyloxy)benzene, 2-amino-4-(β -hydroxyethylamino)-1-methoxybenzene, 1,3-diaminobenzene,

1,3-bis(2,4-diaminophenoxy)propane, 3-ureidoaniline, 3-ureido-1-dimethylaminobenzene, sesamol, 1- β -hydroxyethylamino-3,4-methylenedioxybenzene, α -naphthol, 2-methyl-1-naphthol, 4-hydroxyindole, 4-hydroxy-N-methylindole, 2-amino-3-hydroxypyridine, 3,5-diamino-2,6-dimethoxypyridine, 1-N-(β -hydroxyethyl)amino-3,4-methylenedioxybenzene, 2,6-bis(β -hydroxyethylamino)toluene and their addition salts.

48. The composition of claim 46, wherein the additional coupler(s) are present in a quantity of between 0.001 and 20%, by weight relative to the total weight of the composition.

49. The composition of claim 1, wherein the composition further comprises at least one direct dye.

50. The composition of claim 1, wherein the composition further comprises at least one hydroxylated solvent such as ethanol, propylene glycol, glycerol, polyol monoethers.

51. The composition of claim 1, wherein the composition further comprises an oxidizing agent chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxidase enzymes, and preferably hydrogen peroxide.

52. A method for the oxidation dyeing of keratinous fibres such as hair, wherein a dyeing composition as defined in claim 1 is applied to the fibres in the presence of an oxidizing agent.

53. A multicompartment device in which a first compartment contains a dyeing composition for dyeing keratinous fibres, as defined in claim 1, and a second compartment contains an oxidizing agent.